

# SR 520 Bridge Replacement and HOV Project

Revised June 2004

## 4-Lane Alternative 2 General Purpose Lanes in each direction



### Project Description:

- Rebuilds the existing four-lane highway from I-5 in Seattle to Bellevue Way with 2 lanes in each direction and full width shoulders
- Rebuilds the Evergreen Point Bridge and the Portage Bay Bridge
- Rebuilds existing westbound HOV lane from 108<sup>th</sup> to the east end of the Evergreen Point Bridge
- Rebuilds outside Transit Stops at Montlake, 76<sup>th</sup>, & 92<sup>nd</sup>
- Adds HOV access to the I-5 express lanes to downtown Seattle
- Creates new bicycle/pedestrian link across Lake Washington
- Electronic toll collection
- Pontoons sized to carry future High Capacity Transit.

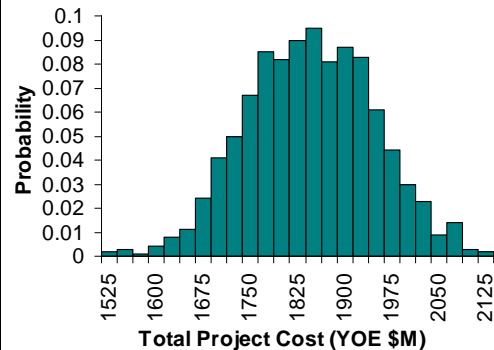
### Schedule:

Begin Construction  
2008

End Construction  
Range: 2015 - 2016

### CEVP Result:

(Cost Estimation Validation Process)



### Project Benefits:

- Reduced seismic and storm damage risks to the Evergreen Point and Portage Bay Bridges
- Improves safety and reliability by adding full shoulders to SR 520
- Maintains current highway capacity and serves 3% more people in 7% fewer vehicles during the peak travel time
- Provides increased transit benefit with new SR 520 to I-5 express lanes connection and improved SR 520 Transit Stops
- Improves environmental quality by removing “ramps to nowhere” in Arboretum area, improving water quality by treating storm water and reducing noise in communities by adding sound walls
- Creates a new link for bicycles and pedestrians across Lake Washington and to existing trails.
- Accommodates future High Capacity Transit across Lake Washington on the floating bridge section.

### Project Cost Range:

**10% chance the cost < \$ 1.7 Billion**

**50% chance the cost < \$ 1.8 Billion**

**90% chance the cost < \$ 2.0 Billion**

### What's Changed Since 2003 CEVP:

- Scope: No Change
- Schedule: Construction schedule includes a “Cash Flow” scenario for project segments.
- Cost: Escalation costs from cash flow scenario and risk associated with the use of long girders resulted in net increase of \$100M.

### Project Risks:

- Changes in construction methods for long girders
- Catastrophic failure of floating and fixed bridges could occur before replacement.
- Limited number of qualified and available contractors could increase costs.
- Near shore construction permitting.
- Changes in seismic design criteria
- Sound Transit North Link alignment coordination.
- Potential legal challenges.
- Delays in funding

### Financial Fine Print (Key Assumptions):

- Project design and construction funding based on cash flow from the Nickel, RTID, Tolling, State, and other funding sources.
- Design funding available by 7/05 and construction funding by 1/08.
- Inflation escalation is to 2012, approximate midpoint of construction
- Additional federal, state and regional money needed to complete project. Assumes tolling
- Project cost range includes \$30 million in past expenses.

Level of

Project Design:

Low

Medium

High



June 1, 2004



Washington State  
Department of Transportation